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EXAMINER	
STERRETT, JONATHAN G	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/987,356	HACK ET AL.	
	Examiner	Art Unit	
	Jonathan G. Sterrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *58-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *58-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4-10-2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Summary

1. **Claims 58-65** are pending in the application. This action is responsive to the election of April 24, 3006. The examiner notes that these claims were elected with traverse.

The applicant argues that the restriction is improper because the search of the various inventions claimed are not different and do not represent a search burden for the examiner.

The examiner respectfully disagrees.

For example, Group II of the claims, providing a display of an optimized value chain, is an entirely different invention than is Group III, which is creating a business collaboration between participants. Group III lists a group of steps to create a business collaboration in a value chain. Group II provides for displaying a value chain that is optimized. While these two inventions may in fact, be usable together (i.e. as subcombinations), providing the steps to create or establish a value chain can be accomplished without displaying an existing, optimized value chain. This is because the steps to create a business collaboration do not require displaying an optimized value chain representing the business collaboration. Similarly, displaying an optimized value chain, that is, a value chain of participants in a collaborative business scenario that is optimized, can be achieved without creating a collaboration representing the business participants working together. A practitioner of ordinary skill in the art could

provide for a display of an optimized value chain (assuming arguendo that the value chain existed to begin with) without utilizing an invention that created a business collaboration. Similarly, the same practitioner could create a business collaboration without displaying an optimized value chain.

Although inventions may be classified in the same class, the examiner would point out that a search would be made across the entire US patent database containing keywords that identify salient features of the different inventions. This is done because, for example, Class 345, dealing with displays, provides for inventions where the art is analogous because inventors are solving similar problems. The examiner would also point out that aside from a keyword search in the existing patent database, there are also mandatory non-patent literature (NPL) databases within Dialog that are required to be searched. For example, a search within these databases using the keywords "supply chain" and "display" produced over 24,000 separate articles that potentially address claimed features of the instant application. Additionally, depending on the claims and the examiner's discretion, there are other searches that may be made within ProQuest and also using Google. Since the potential areas for searching is so broad, the different inventions as claimed are, in fact, a search burden for the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 58-63** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Stephens**, Scott; "Supply Chain Council & Supply Chain Operations Reference (SCOR) Model Overview", May 1999, pp.1-31. (hereinafter **Stephens**)

Regarding **Claim 58**, Stephens teaches:

receiving data that identify the participants and the interactions and receiving data that identify the consecutive order;

p12, SCOR teaches identifying participants in the supply chain – this chart identifies the participants and the interactions (plan source make or deliver) that show the interlocking supply chains between each company. The order is shown, because the chain begins at a supplier's supplier, who delivers goods through the supply chain of a supplier to 'your company'.

in a first view, displaying areas for each participant;

p14, a Level 1 SCOR diagram displays areas for each participant in the supply chain (see p12 also).

in the first view, displaying first graphical depictions of the interactions, wherein first depictions cover areas that correspond to participants, and wherein adjacent first depictions indicate the consecutive order;

p12 & p14, a Level 1 SCOR diagram (as shown on p12) provides a graphical depiction of the supply chain interaction. Companies to the left are those upstream in the supply chain (i.e. adjacent first depictions indicate the consecutive order). The depictions of Plan Source Make Deliver cover areas that correspond to participants. This limitation is also met by a Level 2 SCOR diagram, where depictions cover areas (process types) that correspond to participates, where the adjacent first depictions represent the order. See also p 15 – plan source, plan make and plan deliver are three planning processes that occur in the respective order.

in a second view, displaying the first depictions, wherein the first depictions still cover areas that correspond to participants, and wherein previously adjacent first graphical depictions are displayed with a predetermined distance;

p14, p15, Level 2 and Level 3 display the first depictions wherein plan source make and deliver are areas that correspond to participants – see p15, the decomposition of sub elements of the SCOR model (in this case "Plan") are displayed with a predetermined distance.

displaying second graphical depictions between the first depictions of consecutive interactions, the second depictions symbolizing data that

qualifies the consecutive interactions; and

P14, p15, Level 3 in the SCOR model is a decomposition of the inter company supply chain down on a level that is one of Plan, Source, Make or Deliver (that is a Level 3 model would look at internal processes in a company rated to Plan Source Make and Deliver. A Level 3 SCOR model provides depictions that symbolize data flow the qualifies the consecutive interactions (between plan source make and deliver) see page 20.

in a third view, displaying third graphical depictions of the components that implement the interactions.

Page 20, A Level 3 SCOR model displays the supply chain system configuration elements (i.e. the depictions of the components). This Level illustrates how a company is structured to compete (see 'comments on p 14 regarding the SCOR level 3).

Stephens teaches that the SCOR model provides a standardized way for companies to view, analyze and improve their supply chain. SCOR is a reference model designed to help companies look at all aspects of their supply chain visually to spot deficiencies in how the supply chain is constructed and how the elements necessary for efficient operation of Plan Source Make and Deliver interact together.

Stephens does not teach where the SCOR model is on a display where there is a third view, which when selected by a user provides for other graphical

depictions. However, since Stephens teaches that there are different views required to encompass a graphical depiction of the supply chain (different views provide a different perspective) and it is old and well known in the art to provide for displaying different views on a computer when electronically selected by a user, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Stephens to include a method for displaying different views of the supply chain when selected by the user because it would have made viewing the SCOR model's depiction of a supply chain made more easy and efficient by being operated on a computer.

Regarding **Claim 59**, Stephens teaches the use of graphical depictions to represent participants in a supply chain collaboration (according to the SCOR Plan, Source, Make and Deliver). Stephens teaches using the SCOR model to provide various graphical depictions of processes and participants in the supply chain. Stephens does not teach:

wherein the step displaying the first depictions is performed upon receiving a request from the user to alter the first view.

However, it would be obvious to display the first depictions upon receiving a request from the user to alter the first view. Providing for selections of various views based on receiving a request from the user is old and well known in the art of providing displays.

Stephens SCOR model uses various views and depictions of various aspects including participants and processes of the supply chain. Stephens teaches that adopting the SCOR model with its various views of the supply chain enables a company to improve their supply chain operations.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Stephens regarding providing various depictions of supply chain operations and participants, to include the step of displaying a depiction upon receiving a request from the user to alter the first view, because it would enable improvements in the supply chain to be made by understanding the various depictions and interactions that make up a supply chain. The SCOR model provides views of supply chain elements so that a company can understand how to 'fine tune' their operations strategy (see page 14 under Level 3 'comments). One of ordinary skill in the art would modify the teachings of Stephens to include displaying a first depiction upon request from a user with a reasonable expectation of success, because Stephens teaches that using the SCOR model with its views and depictions provides the understanding necessary for a company to understand and fine tune how they approach managing their supply chain.

Regarding **Claim 60**, Stephens teaches:

wherein in the steps displaying first graphical depictions and displaying second graphical depictions, first and second graphical depictions are polygons.

P 14, the first and second graphical depictions are block arrows (i.e. polygons since these arrows are many-sided. See also p 15.

Regarding **Claim 61**, Stephens teaches denoting a first supply and second supply chain level using arrows for both arrows. The various levels of the SCOR model are noted by nomenclature that is particular to SCOR (e.g. S2 denotes Source Make-to-Order (MTO) products while D2 denotes Deliver MTO products):

While Stephens does not teach:

wherein in the steps displaying first graphical depictions and displaying second graphical depictions, the first graphical depictions are hexagons and the second graphical depictions are triangles;

Official Notice is taken that it is old and well known in the art of graphics to use various shapes to represent different kinds of entities or aspects on a display. This is done so the user can recognize different aspects of a particular item based on their shape, including using hexagons for one kind of display and triangles for another.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Stephens, regarding providing various

depictions representing various aspects of the supply chain, to encode the first and second graphical depictions by using hexagons and triangles, because it would provide the user with an easy way to distinguish between hexagons and triangles.

Regarding **Claim 62**, Stephens teaches a third graphical depiction representing components of the supply chain that implement the interactions. Stephens further teaches that these components may be broken down into another level of detail that provides for a detailed depiction of the specific management practices at this level.

While Stephens does not teach:

wherein in the step displaying third graphical depictions, third graphical depictions with hyperlinks to interactions are displayed;

the use of hyperlinks to further display interactions and additional information is old and well known in the art of computing. Hyperlinks provide an easy way for a user to further select another view with additional information based on which hyperlink is selected.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the teachings of Stephens regarding providing a third level depiction of the supply chain and a fourth level, where the fourth level contains the detailed information representing components on the third level, to use hyperlinks to navigate between the third level to interactions represented on

the fourth level, because it would provide an easy way for users to navigate between the different supply chain views taught by Stephens.

Regarding **Claim 63**, Stephens teaches:

wherein in the step displaying third graphical depictions, third graphical depictions of available components are displayed.

P14 and p20, the SCOR reference model teaches that on the third level (i.e the third graphical depictions), there are a set of system configuration elements that can be displayed. Not all Level 3 process elements are used in representing a supply chain, because Stephens teaches this is the 'process element level'. While Stephens does not explicitly teaching displaying all of the available components, one of ordinary skill in the art of supply chain management and in using the SCOR model to represent supply chains would display graphical depictions of available components, because it would enable a user to easily model a supply chain by displaying the available components of the supply chain for the third depiction.

4. **Claims 64 and 65** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Stephens** in view of **Oota** US 5,740,341 (hereinafter Oota)

Regarding **Claim 64**, Stephens teaches where the relative placement of symbols reflect interactions in a supply chain management approach. Stephens teaches that using different depictions reflects data and material flow aspects of

how supply chain entities interact. Stephens further teaches that depending on how a supply chain is configured (and that both the actual and simulated supply chain can be configured, i.e. designed using the SCOR model), that this design has cost implications for a company (see page 25).

Stephens teaches that a first depiction (SCOR Level 1 supply chain model see pages 23 and 24 for an example Level 1 SCOR geographic and thread map of a supply chain) is connected to a Level 1 SCOR Scorecard where the implications of how the supply chain is configured has implications for supply chain metrics (see page 22 for a Level 1 Scorecard – OFLT or order fulfillment lead time is a SCOR Level 1 metric). One of ordinary skill in the art would recognize that moving various supply chain locations around the Level 1 map on page 23 has implications for example, order fulfillment lead time, since moving a factory closer to a customer would decrease the amount of transportation time and thus negatively impact OFLT. Stephens teaches that the SCOR tool is intended to provide exactly this functionality to users of SCOR, to develop a model using SCOR and to analyze it to determine how the operations strategy can be improved (see page 14 table – note the comment under Level 3 "companies fine tune their operations strategy at Level 3").

Stephens does not teach where depictions use to represent a supply chain process can be shifted by a user as per:

detecting that a user shifts a first depiction from a first area to a second area;

updating a variable that is related to the first depiction and that depends on which area the first depiction covers; and

updating and displaying a second variable that is a function of the first variable.

Oota teaches a graphics software tool that provides for:

detecting that a user shifts a first depiction from a first area to a second area;

column 11 line 50-53, the system detects when a user is dragging (i.e. shifts) a graphical component on the screen from one are to another area (see also col 12 line 25-30; col 12 line 40-43, col 12 line 50-54, col 13 line 44-48)

updating a variable that is related to the first depiction and that depends on which area the first depiction covers; and

column 13 line 42-44, position information (i.e. the variable that denotes where the graphical element is displayed on the screen) is update when the user moves the graphical component (i.e. depends on which area the first depiction covers).

updating and displaying a second variable that is a function of the first variable.

column 16 line 50-54, the system updates the line information related to how components are moved around (and yet are still connected by the line or pipe in how they are shown as being visibly connected on the drawing) and the

variables representing the line in the display are updated accordingly. (see Figure 6 #602 and Figure 7(1) #6021 'system line').

see also column 32 line 28-33, the system optimizes placement of components in the layout according to a minimization algorithm – this uses updating at least a second variable and displaying it as the optimum placement of the piping layout is determined.

Oota addresses difficulties with graphical layout and design to make it easier to a user to move graphical elements around on a display (i.e. to shift them) so that an optimum layout is achieved (one that is optimum as viewed visually on the display by a user). Oota also teaches the use of constraints in optimizing placement by having the computer calculate and determine that layouts at least meet constraints for how they are designed.

Stephens addresses using graphical representations of the supply chain, where the elements are interconnected to represent a supply chain.

Oota addresses using graphical representations of an engineering layout where the elements are connected to represent a process.

Stephens teaches that a supply chain configuration (in how elements are laid out and connected with each other) can be graphically reconfigured to represent improvements in a supply chain.

Oota teaches that an industrial process configuration (in how process elements are laid out and connected with each other) can be graphically reconfigured to optimize the functionality of the process with respect to its environment (column 21 line 35-37).

Oota teaches that updating second variables that depend on a first variable, where the first variable relates to the area that a first depiction covers is useful to help a user optimize graphical placement of elements.

Oota and Stephens are thus analogous art because they are both addressing using graphical displays to help a user optimize the layout and function of a process (Stephen's process is the supply chain – Oota's process is industrial).

It would have been obvious to one of ordinary skill in the art of supply chain management at the time of the invention, to modify the teachings of Stephens, regarding using the SCOR model to graphically represent a supply chain where graphical changes in the supply chain impact the efficiency of that supply chain, to include the step of updating and displaying variables that reflect relocations of supply chain elements, because it would make it easy for a user to optimize the layout of the supply chain, as it was represented graphically.

Regarding **Claim 65**, Stephens teaches SCOR supply chain modeling and reconfiguration to improve the supply chain, as discussed above but does not teach:

to receive instructions to alter any of the first, second, and third views from first and second users, wherein the second user is a remote user.

Oota teaches receiving instructions to alter the first views as discussed above. Oota also teaches a database where the graphic information representing the views displayed and shifted by a user are stored (column 2 line 56-60) but does not teach:

to receive instructions to alter any of the first, second, and third views from first and second users, wherein the second user is a remote user.

However, official notice is taken that it is old and well known in the art of distributed computing to provide means for allowing more than one, including at least a second remote user, to access a system to manipulate information in a database. In cases where sophisticated designs are being constructed, this allows for those designs to be more rapidly completed because more than one user can work on part of the graphic design at one time.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of Oota and

Stephens, regarding providing a graphic design system where a user can manipulate and optimize a design, to provide for receiving instructions to alter views from more than one remote user, because it would provide for a more rapid completion of the design by allowing more than one user to work on the design at a given time.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Iwasa US 5887154 discloses a business process simulation system.

Toong US 6604114 discloses a system and method for organizing data.

Koppolu US 6460058 discloses an object-oriented framework for hyperlink navigation.

Kelly US 6393425 discloses the diagramming of real world models.

Erskine US 6243101 discloses a method of enhancing computer-generated symbols.

Jaremko US 5621871 discloses a method of using callouts.

Dunn US 4813013 discloses a system for generating schematic diagrams.

Hakanson, Bill; "Supply Chain Letter", November 1998, web.archive.org webpage of Dec 5, 1998, web.archive.org/web/19981205005230/www.supply-chain.org/html/about_sec.htm.

Anonymous, "Global link missing from supply chain model", Aug 1999, Transportation & Distribution. Cleveland:.Vol.40, Iss. 8; pg. 7, 2 pgs

Anonymous, "SCOR model users get new benchmarking tool", Apr 8, 1999, Purchasing. Boston:.Vol.126, Iss. 5; pg. 33, 2 pgs.

Anonymous, "SCOR model is key link to stronger supply chain", Sep 1998, Automatic I.D. News. Cleveland:. Vol. 14, Iss. 10; p. 52 (4 pages).

Baer, Tony, "What's brewing: Java and manufacturing", Jul 1997, Manufacturing Systems Hot Issues for Hot Times Supplement, PP: 2-8, Dialog 01493138 01-44126.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS

JGS 5-27-2006

Susanna Diaz

SUSANNA M. DIAZ
PRIMARY EXAMINER

AU 3623